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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/670,212

09/26/2003

Kimio Nakayama

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7590

07/09/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MATZEK, MATTHEW D

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

07/09/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/670,212	Applicant(s) NAKAYAMA ET AL.	
	Examiner MATTHEW D. MATZEK	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-15 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) 13-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-12 and 17-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/24/2009 has been entered.

Response to Amendment

2. The amendment dated 3/25/2009 has been fully considered and entered into the Record. The previously applied prior art rejections have been withdrawn as they failed to provide for the crosslinking agent that is now required due to the amendment of claim 1.

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Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 2, 4, 6-12 and 17-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. One of ordinary skill in the art would not be able to ascertain what components are being reacted to form the crosslinked polymer of claim 1. In particular, the crosslinking agent as now claimed requires two parts: a first crosslinking group and a monomer. Does the crosslinking agent react with the monomer, which then reacts with the elastomeric polymer? Is the crosslinking agent from the first or second group, or does it not matter? Applicant is directed to paragraph 95 of the published application, which clearly sets forth crosslinking agents to be used in conjunction with the elastomeric polymer. In order for the crosslinking agent to perform its designed function it requires two monomers. Claim 1 fails to clearly illuminate which two monomers are to be crosslinked. Claim 1 and its dependent claims fail to meet the standard of operability in that one of ordinary skill in the art would not be able to make the claimed crosslinked polyurethane polymer. The claim as set forth is inoperable.

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4. Claims 1, 2, 4, 6-12 and 17-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended claim 1 recites a crosslinking agent that has an oxazoline group, carbodiimide group, epoxy group, cyclocarbonate group, azirdine group or hydrazide group; and selecteed [sic] from the group consisting of methyl (meth)acrylate, ethyl (meth)acrylate, di(meth)acrylate, 1,9- nonanediol di(meth)acrylate, neopentyl glycol di(meth)acrylate, divinylbenzene and ally (meth)acrylate. Paragraph 95 of the published application lists crosslinking groups without the acrylate and divinylbenzene monomers being listed. Therefore, the crosslinking agents as currently claimed are considered new matter.

5. It is suggested that Applicant review paragraphs 93-95 to determine an embodiment that is adequately supported and enabled to form the crosslinked polyurethane of the instant invention.

6. Claims 1, 2, 4, 6-12 and 17-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Upon reviewing claim 1 it is unclear to Examiner which components are being reacted or in what order the components are being reacted to form the elastomeric polymer A, or polyurethane. In the first part of the claim, the building blocks of the polyurethane are clearly limited to a diisocyanate component, a polymeric polyol component, a chain extender and a crosslinking agent. However, as the claim proceeds the limitations surrounding the crosslinking agent make the claim indefinite. Applicant is directed paragraphs

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93-95 of the published application for suggestions as to set forth an embodiment for making the polyurethane polymer that is adequately supported and definite.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 2, 4, 6-12 and 17-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

At this point in prosecution it would be improper for Examiner to apply references in the form of prior art rejections as it is unclear to Examiner what Applicant is intending on claiming. However, the prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 5,258,481; 5,338,613; 6,218,500.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW D. MATZEK whose telephone number is (571)272-2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571.272.1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew D Matzek/
Examiner, Art Unit 1794

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit
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